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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,069	12/04/2003	Carsten Muenk	532792000100	9175

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EXAMINER	
HUMPHREY, LOUISE WANG ZHIYING	
ART UNIT	**PAPER NUMBER**
1648	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/729,069	**Applicant(s)** MUENK ET AL.	
	Examiner Louise Humphrey, Ph.D.	**Art Unit** 1648	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☒ They raise the issue of new matter (see NOTE below);
   (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: 33-55.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because: the proposed amendments contain new subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The new claim 33 contains a new limitation that "the first cell and the second cell are different cell types," which are neither explicitly nor implicitly supported by the original disclosure or the specification. The specification positively recited the cell types, 293T or Hela, to be used in the claimed cell fusion method, in Example 1, ¶82-86, and demonstrated the same cell type, 293T, for the first and second cell in the fusion assay in Examples 2-4, ¶87-102. The specification does not recite that the frist cell and the second cell are different cell types. Therefore, the new limitation narrows down the original scope of invention and introduces a new matter.

AMENDMENT

In the claims:

Please cancel claims 1-14 and 21-32 without prejudice or disclaimer and please add new claims 33-55 as set forth in the complete listing of the claims hereafter. This complete listing of the claims replaces previous claim listings.

DO NOT ENTER.

LH 11/22/06

1-32 (Cancelled)

33. (New) A method for detecting the presence or absence of cell fusion, which comprises:

contacting a system comprising a first cell with a second cell, wherein:

the first cell comprises a first reporter molecule fragment and a viral envelope protein;

the second cell comprises a second reporter molecule fragment and a viral envelope protein receptor capable of binding to the viral envelope protein of the first cell;

the first cell and the second cell are different cell types;

the first cell and the second cell are independently selected from the group consisting of NIH-3T3 cells, QT6 cells, Cf2Th cells, MV1 Lu cells, Sf9 cells, H-9 cells, U-87 MG cells, SCL1 cells, CEM cells, HeLa cells, CHO cells and 293T cells;

the first reporter molecule fragment and the second reporter molecule fragment combine to form a functional reporter molecule upon fusion of the first cell with the second cell; and

detecting the presence or absence of a signal produced by the functional reporter molecule, whereby the presence of cell fusion is detected by the presence of a signal and the absence of cell fusion is detected by the absence of a signal.

34. (New) The method of claim 33, wherein the first reporter molecule fragment and the second reporter molecule fragment are independently selected from an α-fragment of β-galactosidase and an Ω-fragment of β-galactosidase.

35. (New) The method of claim 33, wherein the second cell further comprises a viral envelope co-receptor protein.

36. (New) The method of claim 35, wherein the viral envelope protein is HIV gp160, the viral envelope protein receptor is CD4, and the viral envelope protein co-receptor is CCR5.

37. (New) The method of claim 36, wherein the first cell further comprises HIV rev.

38. (New) The method of claim 35, wherein the viral envelope protein is HIV gp160, the viral envelope protein receptor is CD4, and the viral envelope protein co-receptor is CXCR4.

39. (New) The method of claim 38, wherein the first cell further comprises HIV rev.

40. (New) The method of claim 33, wherein the viral envelope protein is selected from the group consisting of HIV gp160, Ebola GP, HTLV SU, and influenza HA.

41. (New) The method of claim 33, wherein the signal is chemiluminescent.

42. (New) The method of claim 33, wherein the viral envelope protein is exogenously expressed.

43. (New) The method of claim 33, wherein the viral envelope protein receptor is exogenously expressed.

44. (New) The method of claim 33, wherein the viral envelope protein is endogenously expressed.

45. (New) The method of claim 33, wherein the viral envelope protein receptor is endogenously expressed.

46. (New) The method of claim 33, wherein the system comprises a molecule that inhibits cell fusion.

47. (New) The method of claim 33, wherein one of the first and second reporter molecule fragment comprises a fragment of beta-galactosidase consisting essentially of an N-terminal alpha region of beta-galactosidase.

48. (New) The method of claim 47, wherein the N-terminal alpha region of beta-galactosidase spans about amino acid 1 to about amino acid 100.

49. (New) The method of claim 47, wherein the N-terminal alpha region of beta-galactosidase spans about amino acid 1 to about amino acid 85.

50. (New) The method of claim 33, wherein one of the first and second reporter molecule fragment lacks a functional N-terminal alpha region of beta galactosidase.

51. (New) The method of claim 50, wherein one of the first and second reporter molecule fragment lacks a region spanning about amino acid 10 to about amino acid 37.

52. (New) The method of claim 33, wherein one of the first and second cell is a human cell.

53. (New) The method of claim 52, wherein the human cell is selected from the group consisting of 293T cells and HeLa cells.

54. (New) The method of claim 33, wherein each of the first and second cell is a human cell.

55. (New) The method of claim 52, wherein the human cell is independently selected from the group consisting of 293T cells and HeLa cells.